

The Potential Threat of Cyberterrorism to the National Security: Theoretical Framework

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Abstract : The revolution of computing and networks could revolutionise terrorism in the same way that it has brought about changes in other aspects of life. The modern technological era has faced countries with a new set of security challenges. There are many states and potential adversaries who have the potential and capacity in cyberspace, which makes them able to carry out cyber-attacks in the future. Some of them are currently conducting surveillance, gathering and analysis of technical information, and mapping of networks and nodes and infrastructure of opponents, which may be exploited in future conflicts. This poster presents the results of the quantitative study (survey) to test the validity of the proposed theoretical framework for the cyber terrorist threats. This theoretical framework will help to in-depth understand these new digital terrorist threats. It may also be a practical guide for managers and technicians in critical infrastructure, to understand and assess the threats they face. It might also be the foundation for building a national strategy to counter cyberterrorism. In the beginning, it provides basic information about the data. To purify the data, reliability and exploratory factor analysis, as well as confirmatory factor analysis (CFA) were performed. Then, Structural Equation Modelling (SEM) was utilised to test the final model of the theory and to assess the overall goodness-of-fit between the proposed model and the collected data set.

Keywords : cyberterrorism, critical infrastructure,, national security, theoretical framework, terrorism

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